May 18, 2005

Mr. Philip L. Eisenberg Chair Blue Ribbon Task Force

Dear Mr. Eisenberg

As you know, WWF convened a panel of four distinguished Californians who have been active in the discussion of marine protected areas in past years to identify points of agreement on the MLPA initiative. With this letter, I am transmitting to the Blue Ribbon Task Force their joint statement, "Making the MLPA Work"

The panelists, Dr. Mark Carr, Zeke Grader, Tom Raftican and Kate Wing, met twice and have deliberated on a joint statement over several months. The panel members did not agree on all the issues facing the Blue Ribbon Task Force, because they represent different perspectives on issues before the Blue Ribbon Task Force. However, they were able to come to a consensus on an impressive a number of substantive points, and they make a series of recommendations for maximizing the effectiveness of the MLPA.

WWF believes that the ability of these four figures, coming from four different perspectives, to reach this degree of consensus shows that it is possible to make significant progress on the difficult issues facing the MLPA process. We hope that this statement will be a useful input to the work of the Task Force and of the Fish and Game Commission in advancing the MLPA initiative.

Sincerely,

Scott Burns
Director, Marine Conservation Program
World Wildlife Fund

# Making the MPLA Work

Statement by a WWF Panel to the Blue Ribbon Task Force

**Mark Carr** 

**Zeke Grader** 

**Tom Raftican** 

**Kate Wing** 

## 1. A New Stage of Discussion on MPAs

We have come together with a common desire for healthy oceans that will continue to support marine life for the indefinite future. We represent different perspectives on MPAs, and not all of us agree that additional MPAs are needed on the California coast.

We recognize, however, that the debate over MPAs has evolved over the past few years. At an earlier stage, discussions of marine protected areas sometimes overemphasized their value for fisheries management and implied that they were a panacea for some problems of fisheries management. Specifically, it was sometimes suggested that management outside MPAs could be greatly diminished, fisheries yields could be markedly enhanced, and even that evaluation of MPA effects was not critical. As the breadth and number of scientists and conservationists engaged in this issue expanded, many have expressed concern that these claims were overstated. Although the theoretical relationship between MPAs and fisheries yield continues to be explored, scientists have shifted focus from the role of MPAs in improving fisheries yield and instead stress their potential conservation benefits and their value for baseline research. The climate surrounding MPAs has become highly polarized. Many proponents of marine reserves recognize that the fisheries benefits of MPAs have been "oversold" in the past, and that the perception of such overselling caused defensive reactions. Commercial fishermen and recreational fishermen have been skeptical of the promised benefits of marine reserves, and some opponents have exaggerated the potential negative outcomes of MPAs. This difficult climate has set back discussions and stakeholder negotiations on designing MPA networks.

Given this evolution in thinking within the scientific and conservation communities on the value and proper roles of MPAs, we feel that a new stage of discussion on MPAs can and should begin, in which both exaggerated expectations and extreme fears are left behind. Although some of us are not convinced that additional MPAs are needed on the California coast, we did agree on the following points, which we hope will be useful to the task force by showing that there is room for common ground on a number of important issues among stakeholders with different interests.

A note on terminology: While the MLPA uses the phrase "network of MPAs," scientists sometimes have applied the term "network" of marine protected areas only to those MPAs that are connected by larval dispersal from one MPA to another The term "system" of MPAs is often used to describe MPAs that are designed in conjunction with one another but not connected by the transfer of larvae among MPAs.. Because the term network is not explicitly defined in the law, we recommend the Task Force be clear in how it uses the terms "network" and "system" to avoid ambiguity and misunderstanding.

## 2. The Relationship between MPAs and Fisheries Management

The MLPA specifically focuses on conservation benefits of MPAs, not fisheries management. MPAs should not be seen as a substitute for effective fisheries management. The science of benefits to fisheries from MPAs is quite new, with relatively few case studies of MPAs in temperate waters. The export of egg and larvae beyond MPA boundaries has been inferred from estimates of larval dispersal distances relative to MPA size and demonstrated mainly through modeling studies. While it is clear that some larvae produced within MPAs will disperse outside MPAs, it is unclear whether that will result in an eventual increase in fishery yields because the factors limiting recruitment may not be a lack of larvae but instead might, for example, be a lack of forage or other resources for juvenile and adult fish.

However, MPAs can provide reference areas for determining the impacts of various types of fishing activities on local fish populations and ecosystems. This might be done by allowing comparisons to be made between ecosystems with fished and un-fished populations and those with different regulations establishing various levels of effort, kinds of fishing and gear types. The purpose of such comparisons is to better understand the relative contributions of fishing and other sources of change (i.e., climatic variability) on populations and ecosystems.

MPAs for the purpose of providing baselines for assessing the effects of different levels and types of fishing may contribute to the effectiveness of fisheries management. For decades, fisheries managers have not been able to adequately track the consequences of a given management measure because there was no reference area with which to compare the area being fished. Fisheries managers have had to rely on time series analyses, which cannot really provide a cause and effect relationship between the level of fishing and fish mortality and which require a long time series in order to draw many conclusions. As a result, management actions generated by time series analyses often lag well behind the changes in stocks trends to which they are designed to respond. Baseline research may lead to management actions that are both timelier and better targeted.

MPAs may also complement fisheries management tools by protecting species that are particularly vulnerable to by-catch or low-productivity species (i.e., those whose individual and population growth rates are particularly slow). They may also act to protect the genetic integrity of fished stocks, preventing artificial selection sometimes caused by mortality targeted in particular areas or at particular sizes of individuals.

### 3. The Master Plan Framework and Beyond

The Master Plan Framework should be the vehicle for a comprehensive review of existing MPAs and for devising a strategy for a system of MPAs in California.

We believe that the Master Plan Framework should require that each MPA or

group of MPAs have defined goals and objectives, such as providing baselines for assessing human impacts on species and ecosystems, protecting marine natural heritage and unique habitats, or achieving social benefits. These objectives and goals should be the basis for design considerations (the number, size and siting of MPAs). The activities permitted should derive directly from those goals and not discriminate arbitrarily against any particular use. We encourage the designers not to be overly constrained by the legal definitions of "park", "conservation area", and "reserve", but to truly match regulations to the objectives of an MPA.

To meet these various objectives, the design of MPAs should be based on scientific data and the knowledge of local fishermen and other ocean users regarding biogeographic patterns, human uses, biological communities and habitats in which life history stages of any target species will occur.

A variety of MPAs can be used to achieve the objectives of the MLPA. The array of MPAs should include those which would allow opportunities for recreational fishing and compatible commercial fishing, using various regulations to increase biomass, prohibit fishing that damages or alters habitat, and protect biodiversity. The goals and objectives of each MPA as well as the relevant knowledge of fishing impacts should determine the kinds and levels of fishing permitted within an MPA. In developing fishing prohibitions within an MPA, however, careful consideration should be given to allowing, consistent with the objectives of the MPA, fishing, including catch and release, of highly migratory, pelagic stocks, such as salmon, albacore and white sea bass, that tend to spend only a short time in a proposed protected area and where the adverse impact of a ban on these fisheries would far outweigh the benefit to the MPA.

Where appropriate, MPAs should aim at achieving the MLPA goal of improving recreational opportunities and the California Ocean Protection Act (COPA) objective of providing public access to the ocean and ocean resources, including to marine protected areas, for recreational use, consistent with long-term conservation of those resources.

MPAs should be thought of as one part of an overall marine life management plan that also includes effective actions to address all human-induced threats to oceans and marine life, such as introduced species, land-based pollution, oil spills, unsustainable fishing, climate change and watershed degradation. Indeed, recent legislation emphasizes the need for regulatory agencies to fill gaps in existing regulatory policies and implement comprehensive policies addressing the full range of threats to ocean quality and marine life. The effectiveness of MPAs as management tools relies on integration with successful management of these other human impacts within and outside of a system of MPAs.

The existing system of fisheries regulations, including MPAs, should be one of the factors taken into account in deciding on the number, size and location of marine MPAs. Conversely fishing regulations should be reexamined in light of the establishment of any new MPAs. One set of recommendations for how this might be done is included in the Pacific Fishery Management Council white paper on marine

reserves produced by its Scientific and Statistical Committee.

MPAs that are revised or newly established are more likely to achieve their objectives if they have a high degree of support from users. The more users have been involved in and understand the rationale for the decisions on the size, shape and siting of MPAs in their region, the more likely they are to support the resulting systems of MPAs. In addition, many recreational fishermen may be willing to support greater displacement of fishing effort by marine reserves if the remaining fishing opportunities can be enhanced by increasing fishery production through reef and habitat enhancement and restoration programs and hatchery programs. Many commercial fishermen, however, remain skeptical about any benefit that may be derived from artificial reefs and ocean enhancement hatchery programs.

The scientific bases for establishing any MPA and for the size of those sites should be fully transparent and should be communicated to users and other stakeholders in a way that can be readily understood by all. In this regard, we recommend that the work of science panels should not proceed entirely separately from the work of the stakeholder-based working groups. We support all efforts to integrate these two processes at both statewide and regional levels.

Decisions on the number and size of MPAs should not be based on a predetermined percentage of a particular habitat to be put under protection. If targets for percentage of biomass of targeted species to be protected are proposed, they should be based on the best scientific information available for each species. Percent targets are likely to be highly contentious and polarizing. The more important argument is the biological justification for the target.

Consistent with the goals and objectives of the MPA, when choosing between two biologically equivalent sites, the state should recommend the option with the least possible social and economic impact to stakeholders. The degree of displacement and consequences of that displacement will vary considerably depending on the site chosen. The BRTF should encourage the Fish and Game Commission to be innovative and creative and to utilize the full scope of its authority to deal with displacement issues. When considering the social and economic effects, positive or negative, of a given closure, data should be collected on a detailed level—such as by sector, by gear type, and species targeted—and not only on an aggregate level.

All nonproprietary data available to the decision makers in the process of formulating the Master Plan Framework should be made available to the general public. This is important to ensure stakeholder support. The state, or a separate independent body, should create an internet map site, where the public can view existing maps of biological and physical data on the entire coastal marine area, existing area closures, including areas closed because of existing reserves and areas closed due to fisheries management, and other relevant information, such as landmarks and public access points. This site should also link to long-term ocean monitoring data such as the CALCOFI and CenCOOS programs. One way of making such data available to the general public

would be for the agencies which now hold the data to put them on the Blue Ribbon Task Force's website, as a trusted source of information for stakeholders.

## 4. An Adaptive Management Approach

We strongly support the use of an adaptive management approach as part of the Master Plan Framework for MPA systems. We understand adaptive management to mean continuing to collect and analyze data on the performance of each MPA in a given system in order to determine whether and how to revise a particular MPA or system of MPAs. That could mean refining different types of MPAs by making changes in the size, shape or management measures employed in a particular MPA.

The adaptive management approach needs continuous monitoring and evaluation of the performance of each MPA. The absence of any system of monitoring and evaluation of results has been a major weakness of the MPAs that California has established in the past. Monitoring and evaluation of performance requires in turn that the degree of achievement of each MPAs goal and objective be measurable and scientifically verifiable. The methodologies and criteria for measurement and verification of performance should be built into the process of designing and managing an MPA system. To these ends, the management of MPAs should involve comprehensive systems of collection and analysis of data, not just on species targeted by fisheries but also on physical (e.g., water quality, temperature) and biological (e.g., kelp, seabirds, prey species) components of the ecosystem.

The Master Plan Framework should establish the means by which data on the performance of MPAs can be collected and evaluated and revisions to MPA systems can be made. With the advice of the Science Advisory Team and of the Statewide Interest Group, the Blue Ribbon Task Force should recommend statewide general guidelines and principles for how each MPA proposal or regional working group develops:

- A realistic, science-based time frame for evaluation
- A process for interpreting monitoring results and for reaching conclusions about revision
- Criteria for changes in boundaries, management activities or the status of a given site.

The Blue Ribbon Task Force should recommend that the Fish and Game Commission create a Standing Review Committee to make recommendations to the Commission in regard to evaluations of existing MPAs and changes in boundaries, management activities or legal status, based on the agreed criteria. The Standing Review Committee should have a workable size and adequate knowledge the history of the MPAs under review, and its members should have a fixed term.

It is extremely important for the Standing Review Committee to operate with

complete openness and transparency by holding meetings that are open to the public and by providing opportunities for public comment. However, this does not mean that public comment in the meets should be unlimited. For example, public comment could be provided to through representatives of the Standing Review Committee in caucuses held either during or outside the meetings.

The Master Plan Framework should recommend a strategy for adequate dedicated funding for monitoring, evaluation and enforcement of the statewide system of MPAs. We believe it is important that the scheme for dedicated funding should do nothing to weaken the funding for the broader system of marine management. The Blue Ribbon Task Force should recommend a system of user fees for MPAs that include both consumptive and non-consumptive users, such as surfers, kayakers, divers and commercial and recreational fishermen. Finally, it should recommend that a larger share of General Fund monies be devoted to proper management of California's irreplaceable marine resources.

We believe that the Master Plan Framework process should consider ways in which reference MPAs, particularly those with no-take zones, can be made as small as possible consistent with the fulfillment of their objectives. Whether a given no-take zone should eventually be converted back to a fishing zone, modified, or fundamentally redesigned should depend on the original goals and objectives of the MPA as well as on the evaluation of the performance of the MPA in question.

Research in MPAs should be consistent with guidelines based on the goals and objectives of the particular MPA and should only be carried out with a permit. We recommend that the Standing Review Committee devise a mechanism for frequent review of applications for research permits in conjunction with the Department of Fish and Game's scientific permitting process. The policy toward research should give preference to non-lethal forms of research wherever possible and to research that will contribute to MPA evaluation and their ecosystem-wide effects. It should also give preference to research approaches that involve stakeholders, including local recreational or commercial fishermen. Especially careful consideration should be given to existing research projects with extensive historical time series, such as CALCOFI. MPA research permit requirements should not unnecessarily impede long-term research projects that are essential for the conservation and management of living marine resources. Data and results generated by research on MPAs should be available as broadly as possible, in a way similar to that described above regarding information used in the design of MPAs.

#### **WWF Panel Members**

Mark Carr is Associate Professor in the Department of Ecology and Evolutionary Biology at the University of California at Santa Cruz. Dr. Carr is an Aldo Leopold Leadership Fellow, sponsored by the Ecological Society of America. He was a member of the Science Advisory Panel for the Channel Islands Marine Reserve Working Group and is a science/education representative to the Monterey Bay National Marine Sanctuary's working group on Special Marine Protected Areas. He currently serves as a member of the Marine Life Protection Act Science Advisory Team. He conducts studies on the long-term dynamics of central California kelp forest ecosystems and the ecology of rocky reef fishes and has published several peer-reviewed papers on the application, design, and evaluation of marine reserves.

**Zeke Grader** is executive director of the Pacific Coast Federation of Fisherman's Associations (PCCFA), as well as executive director of the Institute for Fisheries Resources, a non-profit established to address fish habitat protection. He grew up in the fishing industry in northern California, where his father was a fish processor and his mother a journalist. During 25 years with PCFFA, He has been responsible for drafting legislation and regulations affecting fishing. He is a past member of the Department of Commerce's Marine Fisheries Advisory Committee, past president of the West Coast Fisheries Development Foundation, and a 1988 recipient of the Department of Commerce's "Environmental Hero Award."

Tom Raftican has been president of United Anglers of Southern California since 1997. He currently serves as an advisor to the California Department of Fish and Game on the Ocean Resources Enhancement and Hatchery Panel, the Marine Life Management Act Master Plan Advisory Committee, the Director's Marine Advisory Committee, the White Seabass Advisory Committee, the Ad-Hoc Steering Committee for the Marine Life Protection Act. He was the recreational angling representative for the Salton Sea Advisory Panel and for the Channel Islands Marine Reserve Working Group. He is now recreational angling representative to the Stakeholder Interest Group, advising California's Blue Ribbon Task Force on the Marine Life Protection Act.

**Kate Wing** is a policy analyst with NRDC's ocean protection initiative, where she focuses on fisheries management in the Pacific and marine protected areas. Her background is in biology and research, including a season in Antarctica. She is a graduate of the University of Washington's School of Marine Affairs and served as a Fellow on the Senate Commerce Subcommittee for Oceans and Fisheries. She is a member of the California Sea Grant Advisory Board, the Pacific Fisheries Management Council Highly Migratory Species Advisory Sub-panel, and adviser to the Pacific States Marine Fisheries Commission.